

IN-2-37



Big or Small - We Clean Them All

LANE RESTORATION

4600 BLUFF ROAD, INDIANAPOLIS, INDIANA 46217 • 317 788-4431

WPF

September 25, 1978

EPA Region 5 Records Ctr.



321246

Mr. Guinn Doyle
Solid Waste Management Section
1330 West Michigan
Indianapolis, Indiana 46206

Re: Request for approval for the disposal of solid materials
from lagoons 3, 7, 8 and 10 of the Belmont Avenue Sewage
Treatment Plant.

Dear Mr. Doyle:

We are hereby requesting approval for the disposal of the above
referenced material at the 3200 South Harding Street Landfill.

Enclosed please find reports of analyses from leachate tests for
cynide for each of the four lagoons from O. A. Laboratories. The
results are much lower than we anticipated and the explanation
for this can be found in the latest supplement for the project.

If you have any questions or comments please contact me.

Sincerely,

W. J. Lane

W. J. Lane

Enc.

STATE BOARD OF HEALTH
DIVISION OF ENGINEERING
RECEIVED

SEP 25 2 23 PM '78

Supplement to Proposal for the Harding Street (Thompson) site subject to the disposal of contaminated material from the Belmont Sewage Treatment Lagoons.

PURPOSE OF SUPPLEMENT

The Tousley-Bixler Construction Company has indicated that there is an anticipated increase in volume of unsuitable material from the bottoms of the lagoons that are being cleaned out at the Belmont plant expansion. Area # 2 of the original proposal will not accommodate this increased volume. It is necessary to request approval for the anticipated disposal of the subject material into Area #1 of the original proposal.

REPORT OF PROGRESS

Portions of the material received into Area # 2 have dried to the point that a bulldozer has been used to compact the material without hanging up in the material. This was done in spite of the fact that this has been the wettest rain season in 20 years.

Once compacted, the material was covered with ash. It is still spungy and trucks cannot be driven over the material. The material does compact well once it dries enough.

Area # 2 will not be completed to final elevation by the deadline of November 1, 1978. If material is piled into the driveways (roadways) of Area # 2, rain water will not be able to drain out of the area and the sludge will not dry, but rather will continue to hold moisture and even become saturated.

We will continue to compact and cover the material taken into Area # 2, but we must request that the interim deadline of November 1, for completion of reaching final elevation in Area # 2 be altered.

ANTICIPATED DISPOSAL VOLUME

It has been determined that there will be 80,000 cubic yards of material available from the five remaining lagoons (3, 5, 7, and 10). Area # 2 will accommodate 25,000 additional yards and Area # 1 will handle 65,000 cubic yards.

It will now be possible to complete Areas 1 and 2 according to the master plan with the newly calculated volumes available from Belmont. All refuse received in the past at the old Thompson Landfill will now be covered and stabilized once all the material from Belmont is received at the Harding Street site.

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SANTOYO CONSTRUCTION
DIVISION
STATE DEPT OF HEALTH

THE QUESTION OF CYANIDE CONCENTRATIONS

The composite leachate sample analysis submitted with the original proposal indicated a high cyanide content. This has created a question as to where the high cyanide concentrations are since individual concentrations of cyanide tested in lagoons 4 and 9 have been reported low.

The samples taken for the original composite analysis were taken prior to the removal of the liquid from the lagoons. During the process of pumping the liquid from the lagoons, a large air compressor is pulled back and forth over the surface of the lagoon injecting air deep into the lagoon through pipes. This causes homogenising of liquids and solids and altering all the material in the lagoon. Much of the cyanide originally detected in the composite sample has been homogenised into the liquid and already hauled away. The material from the lagoon bottoms, tested after the liquid has been removed, then yields a lower cyanide concentration.

As an odor control measure, lime was added to lagoons 8 and 10. A recent leachate analysis from lagoon 10 bottoms yielded a cyanide concentration of 4 parts per billion. According to Bill Oatess of O.A. Labs., the addition of lime to lagoon 10 caused the remaining cyanide to be "tied up" and not subject to leaching out in any appreciable concentration.

METHOD OF CYANIDE LEACHATE ANALYSIS

O.A. Laboratories has been conducting all our laboratory testing for this project. They have recently developed a new method of leachate preparation in accordance with new Federal EPA requirements.

The new method of leachate preparation requires stirring the sample in water for 48 hours prior to analysis. Previous leachate preparations involved only three hours mixing in a blender.

Mr. Oliver of the Solid Waste Management Section should have a copy of this new leachate preparation method.

CONCLUSIONS

It has been obvious that personnel involved with approving this project at the State Board of Health have been reluctant to do so. There have been many delays, many questions and much time has passed since the original proposal for this project was made.

Much has been learned about the material and how it must be handled since the actual start of the project. Methods of handling as proposed and as specified in the ISBH approval letter have been changed:

- (1) The material cannot be applied in layers; it must be pushed into place and cannot be driven on immediately.

- (2) The material must be allowed to dry and must be able to drain in order to get a bulldozer on it later to compact and cover.
- (3) The unusually large amounts of rain have had a bad effect on the entire Belmont project and have caused delays.
- (4) The material has been effective in killing the underground fire, covering the previously exposed refuse and bringing the site to a useable final grade.
- (5) The material has been well-controlled and has created no environmental or public nuisance problems. The news media has applauded the project, something unusual in the environmental field.

This project can be considered "new territory" for all of us. It has aided the City of Indianapolis in their expansion project of the Belmont Plant and will eliminate an eyesore that would have been a perpetual fire and environmental problem.

We hope this supplement has helped you better understand the present status of the project and also understand the problems a contractor faces with the uncertainties of estimates on volumes, methods of handling, weather and condition of the material once it is ready to be moved.

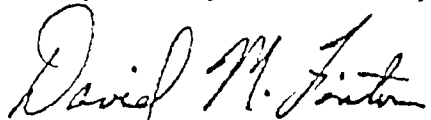
SUMMARY

We are requesting the following changes from our original proposal and resulting approval:

- (1) That Area #1 be approved for disposal of lagoon bottoms from the Belmont Expansion Project. Drainage from Area #1 will flow to the same runoff collection pond as Area #2. (See accompanying drawing).
- (2) That the deadline for reaching final elevation in Area #2 be moved ahead to June 1, 1979.
- (3) That all requirements as previously specified will be adhered to through the completion of the project.

We thank you for your consideration of this supplement and await your prompt response.

Respectfully submitted by:



David M. Finton, Pres.
Technosolve, Inc.

DMF/ljk

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